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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/524,310	08/24/2005	Yves Bader	HT3930USPCT	6435

7590 12/02/2008
John E Griffiths
E I Du Pont De Nemours and Company
Legal Patent Records Center
4417 Lancaster Pike
Wilmington, DE 19805

EXAMINER

JOHNSON, JENNA LEIGH

ART UNIT	PAPER NUMBER
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1794

MAIL DATE	DELIVERY MODE
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12/02/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/524,310	Applicant(s) BADER ET AL.	
	Examiner Jenna-Leigh Johnson	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8,13-18,20 and 21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8,13-18,20 and 21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>9/8/08</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on September 8, 2008 has been entered.

Response to Amendment

2. The Amendment submitted on September 8, 2008, has been entered. Claims 9 - 12, 19, and 22 - 24 have been cancelled. Claims 1 - 3, 5, 7, 8, and 13 have been amended. Therefore, the pending claims are 1 - 8, 13 - 18, 20, and 21.

3. The amendment is sufficient to overcome the claim objections set forth in the previous Office Action.

Claim Rejections - 35 USC § 112

4. Claims 1 - 8, 13 - 18, 20, and 21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 1 is indefinite. As set forth in the previous Office Action, the applicant recites that the fabric is made of two plies that are woven together in a way that they cross each other. However, it is unclear how the applicant is defining the term "ply" since traditionally plies are used to define the individual layer that is formed on the top or the bottom of a double weave or two-layered fabric, and is not related to the individual yarns that can be woven on either the top or bottom layers. How can two plies be interwoven? The term ply refers to all the interwoven yarns that are combined together to make up the entire top or bottom layer of the fabric and not just specific portions that have certain yarns. For

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instance, as shown in Figure 2 of Faircloth, the upper layer is identified as ply **10** and the lower layer is identified as ply **20**, even though yarns **31** and **32** jump from top to bottom and back, such that they are interwoven into both plies. The term ply is general used to describe the entire layer and not the individual yarns or even sections of yarns that make up the layer. Further, it is unclear from the claims and from the descriptions what is required to make up ply portion that forms the different pocket sections. Is this ply just the part of the yarn that overlaps the cross yarn and lies on the face of the fabric? Or are these pocket sections more than a single yarn, but groups of yarns interwoven to create a larger portion of the fabric? How many yarns would need to be used, and how large would the pocket regions need to be to create the claimed interwoven plies? The applicant's figures seem to show individual yarns interwoven together and not actual fabric portions which are interwoven to create larger pocket regions. Therefore, it is unclear how the applicant is defining the term ply and what structure the ply is in such that the ply itself, and not individual yarns are interwoven with each other to have adjacent pockets alternately made of two different single plies? For purposes of examining the term "ply" is interpreted as including individual yarns which can be interwoven with each other to lie on the upper and lower face of the fabric.

6. The phrase "group consisting of and in alternate sequence" in claims 5 and 6 is indefinite. It is unclear what these yarns are alternating with, and what is alternating between the two groups? Are the weft yarns alternating with other weft yarns or with the warp yarns? And how are they alternating? Is one a single yarn and the next a twisted yarn? Is one a monofilament yarn and the next a multifilament yarn?

7. The phrase "at least two different single and twisted yarns" in claim 6 is indefinite? How are the yarns different? Is any slight difference sufficient, such as a slight variation in yarn size, i.e., 40 denier verse 42 denier, or a change in color? Or do the yarns need to be different in some specific way?

Claim Rejections - 35 USC § 103

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8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 1 - 8, 13 - 18, 20, and 21 rejected under 35 U.S.C. 103(a) as being unpatentable over WO 03/039280 (English Translation) in view of Faircloth (3,359,610).

The features of WO 03/039280 and Faircloth have been set forth in the previous Office Action. Claims 5 and 6 are rejected for the reasons of record. Further, Faircloth shows the creation of pockets by using a weave pattern where the elastic yarns **31, 32**, form portions of the top face and bottom face alternately. Thus, the elastic yarns are interwoven to form portions on the top and bottom of the fabric that will shrink upon exposure to heat and pucker. It would have been obvious to one having ordinary skill in the art to modify the weave pattern such that the pocket regions are made into a different shape instead of diamond shape, depending on the desired puckering, as set forth in the previous Office Action.

Response to Arguments

10. Applicant's arguments filed September 8, 2008 have been fully considered but they are not persuasive. The applicant argues that the prior art fails to teach the two single plies are interwoven together to create an alternating pattern. However, as set forth above, it is unclear what the applicant is considering a ply. If the term refers to a preformed fabric layer, then it is unclear how the fabric layers are interwoven without destroying the single ply layers. It seems more likely that the ply refers to the yarns that cross from the top to the bottom fabric to form the pocket sections and the separate layers. In which case, Faircloth shows that the elastic yarns cross from the top to the bottom to form section of fabric that will shrink, that alternate with sections of fabric that don't shrink (see Figure 2). How is this different from the applicant's plies? Further, the elastic yarns are on the top face and the bottom face of the fabric. Thus, the yarn can be the ply which alternates between the top and the bottom. Thus, it would be obvious to use other known weave structures that are designed to pucker upon exposure to heat and create pocket regions to create an insulating fabric as disclosed by WO 03/039280. While the applicant

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argues that the interwoven plies are different from the prior art, the applicant has not shown how the "plies" claimed are different from those puckering regions of Faircloth. The applicant is going to need to clearly define the structure of the plies, and how said plies are interwoven without destroying the single ply to overcome the rejections.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jenna-Leigh Johnson whose telephone number is (571) 272-1472. The examiner can normally be reached on Monday - Friday (8:00 - 5:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

jlj
November 24, 2008

/Jenna-Leigh Johnson/
Primary Examiner, Art Unit 1794